

**Draft**

**Pump Station S-507  
Summary of Hydraulic Design Data**

Revisions:

- 24 January 2001 – Removed Mix Criteria comment associated with providing a duplicate pump.
- 30 November 2000 – Finalized prior to SFWMD concurrence
- 31 October 2000 – Original submission.

XY Coordinate<sup>1</sup> – 842140 611720

Location: Broward County, Holly Lakes Mobile Home Community off of US-27, western side.

Purpose/Operational Intent: Flood Control, Seepage Control

- Offset potential flooding and seepage problems that may occur because of the holding of higher water table elevations within the WCA-3B Seepage Management Area (southern EBS).

Design Condition:	Flood Control	60 cfs
	Seepage Control	Required

Pump Station Capacity Criteria:

- Pump station capacity provides the ability to remove approximately 12" of basin runoff within the community's protection levee within a 24-hour period.

Number of Pumps 2

Pump Mix Type and Size

Electric

2 @ 30 cfs

Mix Criteria:

- Two pumps allow for an intermediate pumping rate and in the event of a single pump failure 50% of total pumping capacity remains.

Control

Local & Remote by SCADA

Design Heads

Normal (6.00 HW to 6.50 TW)

1.00 feet

Maximum (6.00 HW to 8.50 TW)

2.50 feet

Intake Water Surface Elevations

Maximum Non-Pumping

8.50 ft-NGVD

Maximum Pumping

8.50 ft-NGVD

Start Pumping

5.70 ft-NGVD

Normal Drawdown

5.0 to 5.5 ft-NGVD

Minimum Drawdown Pumping

4.50 ft-NGVD

Minimum Non-Pumping

4.00 ft-NGVD

Channel Invert

+1.00

Discharge Water Surface Elevations

Maximum Non-Pumping

8.50 ft-NGVD

Maximum Pumping

8.50 ft-NGVD

Normal Pumping

6.50 ft-NGVD

Minimum Pumping

5.00 ft-NGVD

Minimum Non-Pumping

4.00 ft-NGVD

Channel Invert

-10.00 ft-NGVD

Notes:

- <sup>1</sup> XY coordinates system used is NAD 83, Florida east, state plane.
- All elevations are in feet, NGVD (National Geodetic Vertical Datum of 1929)
- Diesel generator is required for control station and electric pumps in cases of power outage.

Data Compiled from: EN-HI modeling and EN-HH design.